Council Agenda #7B
Meeting of April 11, 2006

Staff Report

DISCUSSION AND DIRECTION CONCERNING THE STORM DRAIN AND NPDES PROGRAM

Honorable Mayor and Council Members:

Summary

This report describes storm drain funding issues for discussion and direction. Methods to reorganize the storm drain operation and NPDES budget account are described. A preliminary list of potential funding sources is identified for further research.

Background

Storm drainage has a wide-ranging organization consisting of:

- Maintenance and improvement of the storm drain conveyance system;
- Maintenance and improvement of natural creeks, culverts, and Water Dog Lake; and
- National Pollutant Discharge Elimination System (NPDES) stormwater permit compliance activities.

Maintenance and Improvements of the Storm Drain Conveyance System

The City owns and maintains a storm drain system of about 125,000 feet (24 miles) of conduit or pipe, 1400 catch basins, 500 manholes, and two pump stations. About 84 percent of the pipe is made of long-lasting reinforced concrete, 10 percent is corrugated metal, 4 percent is plastic and 2 percent is cast iron. Today's cost to build the existing system ranges from $30 million to $50 million.

The City has a consultant preparing a storm drain master plan to define and prioritize system-wide improvements. Staff is developing an asset management system to inventory the age, condition, replacement schedule, and replacement cost of system components. Preliminary results indicate that the drainage system needs about $30 million of improvements to increase capacity and complete gaps in the conveyance network. These improvements would reduce incidence of flooding and property damage. In addition, about $3 million is needed to replace aging corrugated metal pipe. The failures and gaps in the conveyance system incur ongoing costs to the City. The City pays about $140,000 each year for liability insurance charges relating to claims for storm water damages.

Maintenance and Improvements of Natural Creeks, Culverts, and Water Dog Lake

The City leases Water Dog Lake from the University of Notre Dame de Namur (50-year lease expiring in 2015) and operates the reservoir as a flood control facility under a California Department of Water Resources (DWR) dam safety permit. Ongoing annual permit compliance costs are expected to be about $7,500 per year. In addition, in recent years DWR required the City to stabilize a slope failure and replace a portion of the 60-inch outfall pipe, install and monitor survey points, install and monitor groundwater wells, perform a geotechnical stability analysis of the earthen dam, and submit annual compliance reports at a cost to date of about $300,000. The lake has lost significant flood retention capacity due to sediment deposition. Costs to dredge the lake sediments are on the order of $1 million.

The City owns portions of Belmont Creek and East Laurel Creek and has identified several areas where creek bank erosion may be destabilizing City infrastructure including streets and culverts. The City also dredges deposited sediments in lower reaches of Belmont Creek to reduce flooding.

NPDES Permit Compliance Activities

The California Regional Water Quality Control Board (RWQCB) requires the City to perform stormwater quality protection activities through an NPDES compliance permit. Compliance activities include street sweeping, storm drain cleaning, enforcement on commercial and illicit dischargers, public education, and enforcement of development/construction best management practices. The City assesses $30 per residential parcel or commercial acre which generates about $407,000 per year for NPDES stormwater permit compliance. This fee has not changed since Proposition 218 was approved so it no longer covers all of the City's compliance costs. The RWQCB is expected to increase the scope and costs of compliance when it issues the next stormwater permit (tentatively scheduled for this fall).

Discussion

On April 5, the Infrastructure and Service subcommittee meet with staff to begin discussing various issues concerning storm water. Staff brought the following subjects to the committee for discussion.

1. ***How should the City's budget for storm drain capital, storm drain operations, and NPDES compliance be organized?***

   The FY06 Storm Drain Operations and NPDES expense budget (525-3103) is $1,304,028. This includes all staff labor, benefits, services and supplies for storm drain operations, staff engineering capital project design and construction management, and NPDES compliance. Primary revenues into this fund are from transfer of sewer fees ($842,573) and the NPDES stormwater fees ($407,637). Staff finds managing the diverse activities from a single account to be confusing and complex.

FY06 capital storm drain projects budget (525-4315) is $2,021,665. This is funded from a transfer of sewer bonds proceeds.

The nexus for use of sewer fees and sewer bond proceeds is that defective storm drains contribute to inflow and infiltration (I/I) peak loading in the sewer system. The use of a portion of sewer fees for this purpose was established before Proposition 218.

Staff believes that the City's actual costs for NPDES compliance exceed the revenue from NPDES fees. The result is that NPDES compliance is subsidized by the sewer fees. Major compliance cost items are:

- Street sweeping, catch basin cleaning, stormwater pump stations cleaning;
- Staff committee participation, training, recordkeeping, compliance reporting;
- Public education, outreach events, catch basin stenciling;
- Illicit and commercial discharge response, inspection and enforcement.

Staff has identified two options for Council consideration:

1. Council may consider funding a portion or all of street sweeping costs through a solid waste fund or solid waste fee. There is precedent for this practice (California cities of Campbell, Fontana, and Whittier). The rationale is that street sweeping removes solid waste from streets and so is a component of solid waste services. Street sweeping is the costliest single compliance activity at around $350,000 per year.
2. Council may direct staff to form a new storm drain project management service center within the environmental services area for in-house storm drain design and construction management. Funding for storm drain engineering services has been draw from sewer fees since before Proposition 218.

2. How shall the City budget for storm drain pipe rehabilitation?

The City's past practice has been to budget storm drain capital projects in the storm drain enterprise capital improvements program (525-4315). This account is funded from the sewer bond proceeds. Staff is seeking Council direction for the FY07 budget. Alternatives are as follows:

- Budget only storm drain projects with sewer I/I nexus;
- Do not propose storm drain projects until funding is resolved;
- Continue past practice.

3. How should the City fund for repairs and improvements to water bodies, culverts, and completing gaps in the drainage conveyance system?

It is not clear what funding should be used for capital improvement of Water Dog Lake, creek bank stabilization, culvert repair, or construction of new drainage pipes to complete gaps in the conveyance system. These items do not have an I/I nexus to the sewer system. DWR permit

compliance and creek dredging is funded through storm drain operations which has been receiving a transfer of sewer fees and NPDES stormwater fees.

Moving street sweeping from storm drain operations to solid waste will free up about $350,000 of storm drain revenue for other improvements that protect water quality, but this is not sufficient to fully address the needs.

A survey of League of California Cities shows that insufficient storm drain funding is a widespread problem. Cities listed the following funding sources:

- General funds
- RDA bond proceeds
- Gas tax
- Sewer enterprise funds (with nexus to sewer I/I)
- Water enterprise funds (with nexus to protecting groundwater aquifer quality)
- Storm drain assessment districts
- Stormwater utilities
- NPDES assessment funds
- Flood control district funds
- New construction storm drainage fees

4. Should staff research any of the following methods to fund storm drain improvements and water quality compliance? Should staff search for funding sources in addition to those listed below?

- Forming storm drain assessment districts. Assessment districts require property owner approval.
- Increasing the existing NPDES storm water fee or creating additional NPDES fee. Either action will require property owner approval.
- Increasing planned drainage fees. The Subdivision Ordinance calls for a $5000 per acre fee to be paid at the time of filing a final subdivision or parcel map. This fee has not been increased since the 1988 date of the ordinance.
- Extending requirement for drainage fees beyond those developments filing final subdivision or parcel maps. Drainage impact fees could be assessed for any development or redevelopment.
- Monitor and support ACA 13. ACA 13 adds fees for flood control, stormwater drainage, and surface water drainage to those local government property-related fees excluded from the Proposition 218 voter approval requirement. Assemblyman Harman introduced this bill to the California Assembly one year ago.

5. Discussion concerning the Regional Municipal Regional Urban Runoff Permit (MRP) permit.

Staff wants to alert Council that the Regional Water Quality Control Board is in the process of developing a new region-wide NPDES storm water discharge permit. Staff has seen some of the draft permit compliance activities and is concerned about their magnitude and specificity. The following overview of the MRP is drawn from the RWQCB website http://www.swrcb.ca.gov/sanfranciscobay/mrp.htm.

> RWQCB staff is in the process of formulating a Regional Municipal Regional Urban Runoff Permit (MRP) permit to replace individual permits for the Contra Costa, Alameda, Santa Clara, San Mateo, Fairfield-Suisun, and Vallejo programs. The MRP is intended to improve regional consistency and require more specific actions than previous permits. The MRP will be completed in the following stages:
>
> Stage 1 (October 2005 to Spring 2006): Six workgroups composed of RWQCB staff, Bay Area Stormwater Management Agencies Association (BASMAA) and non-governmental groups will develop performance standards for the following permit subjects:
>
> 1. Municipal Maintenance Operations
> 2. Industrial Inspection/Illicit Discharge Abatement/Construction Inspection/Allowable Non-Stormwater Discharges
> 3. New Development and Redevelopment Urban Runoff Control Measures
> 4. Public Information/Participation
> 5. Watershed monitoring
> 6. TMDL pollutant control measures for mercury, copper, nickel, PCBs, and pesticides
>
> Stage 2 (January to June 2006): A Steering Committee composed of RWQCB staff, BASMAA, and non-governmental groups will review the work group performance standards and will draft the administrative Tentative Orders on the MRP. These will be circulated, posted on our web page, and will be the subject of large public workshops for interested stakeholders.
>
> Stage 3 (July to September 2006): RWQCB will produce one or more final Tentative Orders on the MRP, which will be widely circulated for formal, written public comment prior to Water Board consideration. We anticipate this entire process culminating in Board consideration of the MRP in fall 2006.

General Plan/Vision Statement

No impact.

Fiscal Impact

There is no fiscal impact from this report.

Public Contact

The Council agenda was posted.

Recommendation

Staff are seeking Council's discussion on or direction as follows:

1. How should the City's budget for storm drain capital, storm drain operations, and NPDES compliance be organized?
    - Staff recommends creating a new project management service center for storm drain capital improvement projects.
    - Staff recommends that Council consider transferring street sweeping from storm drain operation and NPDES to a solid waste fund.
2. How shall the City budget for storm drain pipe rehabilitation?
    - Staff recommends limiting storm drain project budgeted in FY07 to replacement of existing failing corrugated metal pipe storm drains. Staff recommends postponing budgeting of other drainage projects until their funding source is defined. Some of these unfunded projects will be shown in the out years of the 5-year CIP budget plan.
3. How should the City fund for repairs and improvements to water bodies, culverts, and completing gaps in the drainage conveyance system?
    - Staff recommends that this question be retained for further discussion and consideration. No clear resolution is apparent at this time.
4. Should staff research any of the following methods to fund storm drain improvements and water quality compliance? Should staff search for funding sources in addition to those listed below?

    Staff recommends reaching the following items:

    - Actions needed to form stormwater assessment districts.
    - Actions needed to increase the planned drainage fee from $5000 per acre.
    - Expanding the planned drainage fee to all development and major redevelopment.
    - Actions to increase the current NPDES Stormwater assessment.

- Monitoring status of ACA 13 and action of other communities.

5. Discussion concerning the Regional Municipal Regional Urban Runoff Permit (MRP) permit.

    - Staff recommends that we monitoring the progress of the permit negotiations and keep Council informed of RWQCB proposals and decisions.

Alternatives

1. Take no action.
2. Refer back to staff for further information.

Attachments

None.

Respectfully submitted,

Kathleen E. Phalen, PE City Engineer 650/595-7469 kphalen@belmont.gov	Raymond E. Davis, III, PE, PTOE Director of Public Works	Maureen L. Cassingham Interim City Manager